

B1 channel receiving a corresponding one of said signal contacts and each isolation layer being inserted between adjacent signal contacts when said impedance tuner block is inserted into said connector housing, said impedance tuner block further including a second wall opposite said first wall, said second wall having at least one insert receptacle; and

an impedance adjusting insert in said insert receptacle.

B2 6. (twice amended) The connector assembly of claim 1 wherein said impedance adjusting insert is held adjacent said differential pair.

11. (twice amended) A system for controlling impedance within an electrical connector assembly, comprising:

an electrical connector including:

a housing; and

B3 a plurality of signal contacts and ground contacts aligned in a common plane, said signal and ground contacts held in, and exposed from, said housing, said signal contacts being arranged in differential pairs;

an interchangeable impedance tuner formed of a dielectric material different than air, said interchangeable impedance tuner, comprising:

an impedance adjusting insert; and

an insert receptacle for receiving said at least one insert,

said impedance tuner being positioned proximate said plurality of signal contacts and ground contacts, wherein said impedance adjusting metal insert is oriented parallel to said signal contacts, and wherein said impedance adjusting insert overlaps at least two signal contacts.

15. (twice amended) A system for controlling impedance within an electrical connector assembly, comprising:

an electrical connector including:

a housing; and

a plurality of signal contacts and ground contacts held in, and exposed from, said housing, said signal contacts being arranged in differential pairs;

B4 an interchangeable impedance tuner formed of a dielectric material different than air, said interchangeable impedance tuner including:

a plurality of dielectric isolation ribs on one side surface thereof;

an impedance adjusting insert; and

an insert receptacle for receiving said at least one insert,

said impedance tuner being positioned within said housing proximate said plurality of said signal contacts and ground contacts, wherein one of said plurality of dielectric isolation ribs is positioned between two adjacent signal and ground contacts, wherein said impedance adjusting insert is oriented parallel to said signal contacts, and wherein said impedance adjusting insert overlaps at least two signal contacts.

Remarks

The Office Action mailed April 23, 2003 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.